REMARKS

I. General Matters

Applicants thank the Examiner for acknowledging the claim for priority under 35 U.S.C. § 119, and receipt of certified copies of the priority documents from the International Bureau.

Applicants thank the Examiner for considering the references cited with the *Information Disclosure Statement* filed October 1, 2004.

II. Status of the Application

Claims 1, 4 and 7-21 are all the claims pending in the Application, as claims 18-21 are hereby added, and as claims 2, 3, 5 and 6 are hereby cancelled without prejudice or disclaimer. The *Office Action* indicates that claims 1-17 stand rejected.

III. Abstract Objection

The Examiner has objected to the Abstract for various alleged informalities. The Abstract is hereby amended in an editorial and clarifying manner. Thus, withdrawal of this objection is respectfully requested.

IV. Obviousness Rejection

The Examiner has rejected: (1) claims 1, 4, 11 and 12 under 35 U.S.C. § 102(b) as being anticipated by *Asakura et al.* (US 5,808,260, hereinafter "*Asakura*"); (2) claims 13-17 under 35 U.S.C. § 102(b) as being anticipated by *JP 07-153519*; hereinafter "*JP '519*"); (3) claims 2, 5, 7 and 9 under 35 U.S.C. § 103(a) as being unpatentable over *Asakura*; and (4) claims 3, 6, 8 and 10 under 35 U.S.C. § 103(a) as being unpatentable over *Asakura* in view of *JP 60-50079* (hereinafter *JP '079*). These rejections are respectfully traversed.

IV(1). Independent Claim 1 and Dependent Claim 4

Applicants respectfully submit that *Asakura* fails to teach or suggest independent claim 1's recitation of "pressuring said end of said conductor against said connecting face via a pair of electrodes mutually separated in the lengthwise direction of said conductor."

Specifically, while the Examiner alleges that *Asakura* discloses that electrodes 6 and 7 press the core wires 3a of wire 3 against terminal 2 (*O.A.*, p. 3), Applicants submit that there is no specific teaching of such an operation in *Asakura*. In fact, as specifically indicated in col. 5, lines 5-9, of *Asakura*, the core wires 3a are already crimped inside of caulking portion 2a of terminal 2. Thus, there would be no need for the electrode pairs (6 and 7 of FIG. 1 or 8 and 9 of FIG. 3) of *Asakura* to press the core wires 3a of wire 3 against terminal 2.

Thus, Applicants respectfully submit that independent claim 1 is patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claim 4 is allowable at least by virtue of its dependency.

Further, Applicants respectfully submit that *Asakura* fails to teach or suggest claim 4's recitation that "a part of said conductor that comes into contact with the connecting face of said contact is formed as a flat surface," and therefore that claim 4 is separately patentable over *Asakura*.

Specifically, while the Examiner alleges that core portions 3a of the electric wire 3 are flat when in contact with contact 2 and electrodes 6 and 7 (*O.A.*, p. 4), Applicants respectfully submit that there are no flat surfaces of core portions 3a of electric wire 3 in contact with either terminal 2 or electrodes 6 and 7 (or electrodes 8 and 9). Rather, each of the core portions 3a

appear to have circular cross sections in *Asakura*, as shown in prior art FIGS. 6 and 7 (*Asakura* indicates that this prior art crimping arrangement is used in the inventive welding).

IV(2). Independent Claim 7 and Dependent Claim 9

Applicants respectfully submit that *Asakura* fails to teach or suggest independent claim 7's recitation that the "welding in said welded part is within the scope from the condition in which the depth at the top of a color changed part forming an arc on said contact is above 0.1 mm to the condition immediately prior to the condition of blasting of said contact."

Specifically, while the Examiner alleges that the recited range would have been obvious in view of *Asakura*, since "it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art" (*O.A.*, p. 8), Applicants respectfully disagree.

In contrast, Applicants respectfully submit that *Asakura* does not: (1) recognize that the depth of a color changed part is variable; or (2) indicate in any way that the depth of a color changed part has any particular effect. Thus, Applicants respectfully submit that *Asakura* cannot reasonably be read as indicating that the depth of a color change layer would be a "result effective variable." In this regard, since it has long been held that "[a] particular parameter must first be recognized as a result-effective variable, *i.e.*, a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation (see *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) and MPEP 2144.05(II)(B)), Applicants respectfully submit that the Examiner's rejection is incorrect.

In other words, since the depth of a color changed part is not recognized by *Asakura* as being a result effective variable, Applicants respectfully submit that one of ordinary skill in the art at the time of the invention ("one of skill") would not have been motivated to optimize such a variable to arrive at the claimed range.

Thus, Applicants respectfully submit that independent claim 7 is patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claim 9 is allowable at least by virtue of its dependency.

Further, Applicants respectfully submit that dependent claim 9 is separately patentable over the applied references for at least the reasons discussed above with respect to dependent claim 4.

IV(3). Independent Claim 8 and Dependent Claim 10

Applicants respectfully submit that even a combination of *Asakura* and *JP '079* fails to teach or suggest independent claim 8's recitation that "the state of the welding in said welded part is within the scope from the condition in which the dispersion of a layer of precious metal thinly covering the surface of said conductor of said cable forms an alloy layer of that precious metal in said contact that is of a depth of 5μm to the condition in which said alloy layer is half the thickness of said contact."

Specifically, while the Examiner alleges that the recited range would have been obvious in view of *Asakura* since "it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art" (*O.A.*, p. 10), Applicants respectfully disagree.

In contrast (similarly to independent claim 7 discussed above), Applicants respectfully submit that the Examiner's allegation that any particular depth of dispersion is recognized as a result effective variable in either *Asakura* or *JP '079* is incorrect. Rather, Applicants respectfully submit that neither *Asakura* or *JP '709*: (1) recognizes that the depth of dispersion of a precious metal layer is variable; or (2) indicates in any way that the depth of dispersion of the precious metal layer has any particular effect.

Thus, Applicants respectfully submit that independent claim 8 is patentable over the applied reference. Further, Applicants respectfully submit that rejected dependent claim 10 is allowable at least by virtue of its dependency.

Further, Applicants respectfully submit that dependent claim 10 is separately patentable over the applied references for at least the reasons discussed above with respect to dependent claim 4.

IV(4). Independent Claim 11 and Dependent Claim 12

Applicants respectfully submit that *Asakura* fails to teach or suggest independent claim 11's recitation of "pressure means capable of pressing, via said pair of electrodes, said end of said conductor in contact with said contact, thereby pressuring said end of said conductor against said connecting face."

Specifically, while the Examiner alleges that electrodes 6 and 7 pressure the core portions 3a of wire 3 against a connecting face of the connector 2 (*O.A.*, p. 4), Applicants respectfully disagree.

In contrast (as discussed above with respect to independent claim 1), *Asakura* is silent regarding any pressing function involving electrodes 6 and 7 (or 8 and 9). In fact, there would

have been no need in *Asakura* to provide such a pressing operation utilizing the disclosed electrode pairs, as the core wires 3a are already crimped inside of caulking portion 2a of terminal 2 (see col. 5, lines 5-9).

Thus, Applicants respectfully submit that independent claim 11 is patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claim 12 is allowable at least by virtue of its dependency.

Further, Applicants respectfully submit that dependent claim 12 is separately patentable over the applied references, as Applicants respectfully submit that *Asakura* fails to teach or suggest any pair of electrodes capable of welding a plurality of contacts and conductors as claimed.

IV(5). Independent Claim 13

Applicants respectfully submit that *JP '519* fails to teach or suggest that a plurality of conductive contacts are "on a surface of the base," and comprise "a plurality of signal contacts and a plurality of ground contacts, wherein individual ground contacts are arranged between pairs of adjacent signal contacts."

Specifically, while the Examiner proffers that *JP '519* discloses all of these features of independent claim 13, Applicants respectfully submit that ground bus 15 of *JP '519* cannot reasonably be alleged to be between "pairs of adjacent signal contacts."

Thus, Applicants respectfully submit that independent claim 13 is patentable over the applied references.

IV(6). Independent Claim 14 and Dependent Claims 15-17

Applicants hereby rewrite original dependent claim 14 in independent form (*i.e.*, to include the features of original independent claim 13).

Applicants respectfully submit that *JP '519* fails to teach or suggest the recited arrangement of ground contacts between signal contacts, for at least the reasons discussed above with respect to independent claim 13.

Thus, Applicants respectfully submit that independent claim 14 is patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claims 15-17 are: (1) allowable at least by virtue of their dependency; and (2) separately patentable over the applied references.

For example, with respect to claim 15, Applicants respectfully submit that *JP '519* fails to teach or suggest that "a front face and the rear face of each of said ground contacts are raised above said front and rear faces in a z axial direction that is a direction orthogonal to said front face and said rear face." Specifically, Applicants respectfully submit that *JP '519* discloses that the ground buses 15 are on the same level as wire contact portions 25.

New Claims

Claims 18-21 are hereby added. Claims 18-21 are fully supported by the instant Application, and are respectfully submitted to be allowable both by virtue of their dependency, and by virtue of the features recited therein.

Conclusion

In view of the foregoing, it is respectfully submitted that claims 1, 4 and 6-21 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 1, 4 and 6-21.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,

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